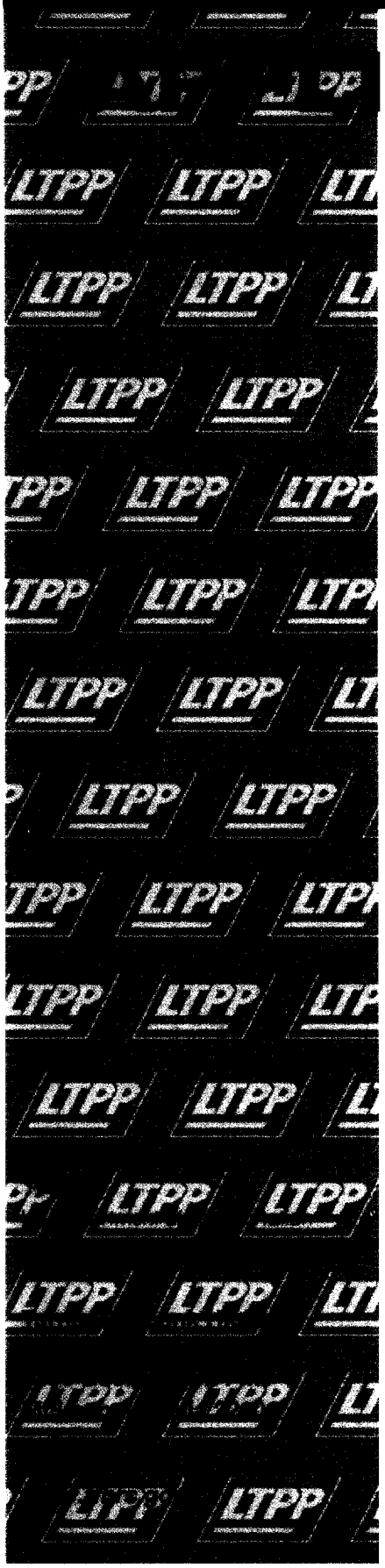

CATIONNOTES

LTPP Distress Identification Manual Sets a Standard for States

Illinois, Michigan, Mississippi, Missouri, Nevada, and Oklahoma use manual as a baseline for identifying and quantifying distresses

Challenge

Accurate reports of pavement conditions are crucial to pavement management and maintenance activities. The reports—which detail the presence of potholes, cracks, and other specific types of distress—must use a common language so that the person reading the report can gain an accurate understanding of the problem and thus plan an optimal remedy. Cracks, for example, come in many shapes and sizes, and their appearance yields important information about the underlying cause—and thus what remedial action should be taken.

State departments of transportation (DOTs) rely on accurate distress reports to plan and implement pavement projects.

The Solution

The Long Term Pavement Performance (LTPP) program's *Distress Identification Manual* uses drawings, text, and color photographs to clearly show common types of distress found in asphalt cement, jointed portland cement concrete, and continuously reinforced concrete pavements. Developed under the Strategic Highway Research Program, the *Distress Identification Manual* is currently being updated and reissued by the Federal Highway Administration's LTPP program.

Putting the Manual to the Test

In Illinois, the *Distress Identification Manual* has been established as the governing criteria for the State's warranty specification for new construction. "The manual has also been used by our Research unit to help identify pavement distresses, severity levels, and the possible causes for particular types of distresses," explained Tom Winkelman, research engineer.

Michigan DOT used the manual for ideas for developing their own distress manual, while the Missouri DOT routinely used the manual for any distress survey performance on a Missouri research investigation.

States throughout the United States have found the manual to be extremely useful in their day-to-day operation. Indeed the Mississippi DOT has adopted

the LTPP *Distress Identification Manual* as the foundation for the department's Pavement Management System. According to Joy Portera, Mississippi's State construction engineer, the manual also provides a baseline for identifying and qualifying distresses exhibited on Mississippi's Warranted Pavement Projects.

Nevada DOT used the manual to update their outdated manual. "Using the manual, we are able to identify and record distress types found on our pavements," explained Sohila Bemanian, assistant chief materials engineer. "In turn, we are then able to determine the most appropriate maintenance and rehabilitation strategies for our roads."

"As part of the Oklahoma Department of Transportation's (ODOT's) pavement management efforts, data on pavement distresses are collected," explained Masoud Pajoh, ODOT's specifications engineer. "The *Distress Identification Manual*," he continued, "has been a very useful tool for standardizing types and severity levels of pavement distresses."

Benefits

LTPP's *Distress Identification Manual* helps States with their pavement management and maintenance activities. The manual provides States with a uniform, accurate way to identify and consistently record pavement distresses. This results in:

- More cost-effective use of maintenance dollars.
- Better decisions about repair methods.
- Accurate time-series records of pavement distress types and severity levels.

For More Information

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